

# G101/G102/G103: GENOTYPING

## APPLICATION

Genotyping is an invaluable tool for identifying organisms carrying genetic variations including insertions and deletions. This method involves the extraction of DNA from animal tissue samples and subsequent amplification of genomic regions of interest by polymerase chain reaction (PCR). The amplified products are analyzed by agarose gel electrophoresis based on their size, and Sanger DNA sequencing option.

## SUITABLE SAMPLE TYPE

- Mouse ear punch
- Mouse tail snip
- Genomic DNA extraction

## SAMPLE PREPARATION

- **Label your samples.** Make sure the label is permanent and easy to read.
- **Protect your samples.** We recommend fully immersing your samples in 70% ethanol. Mouse tails are stable for over a week at room temperature when immersed in ethanol. Don't forget to cap your tubes tightly or the ethanol will leak and erase your labels.

## SAMPLE SHIPPING

- If there is no DNA-sample drop box at your location, please ship your sample.
- The most affordable option to ship your samples quickly is USPS Priority Mail Flat-Rate Envelope, which delivers your samples in 2 days
- For faster service use USPS Express Mail, FedEx, or UPS, which can deliver your samples overnight
- Samples may be shipped at room temperature